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Retirement Investing T hrough Target Date Funds: Traveling along the glide path towards prosperity

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Introduction

For millions of Americans tradition has held that besides "death and taxes" only one other event in life is certain: retirement. The norm has held that after numerous years spent working one would be rewarded with a retirement in which they would have the opportunity to partake in the leisure activities previously forgone.

During these working years it was rare for much thought to be given as to how the "golden" years would be financed since it was commonplace for an individual to be covered by a "defined-benefit" (DB) pension plan which promised a guaranteed (defined) allotment of post-employment benefits, most notably being a pension. With precision, one could map-out their pension payments for years into the future. In addition, Social Security, a government-sponsored social insurance program that includes regular cash payments after a certain age, promised an additional pre-known revenue stream during one's latter years.

Unfortunately, such simplicity is no more and has been replaced by an assortment of retirement funding options. Today, for millions of Americans, the exuberance associated with the culmination of the working years is overshadowed by the frightening reality of how to afford retirement. As fundamental concerns escalate over the feasibility of Social Security to provide a public pension for future generations, and the popularity of employer-led defined benefit pensions diminishes in favor of employee-directed defined contribution (DC) plans, an unprecedented number of Americans face the challenge of how to insure financial security in retirement.

This changing paradigm places a heighten level of importance on the management of one's Individual Retirement Account (IRA) and their 401 (k), a popular employer-sponsored

retirement program. Once considered supplemental sources in retirement funding, the IRA and the 401 (k) are rapidly becoming the primary components. Unlike the DB pension and Social Security, the IRA and the 401 (k) place the preponderance of the onus on the future retiree to maximize the dollar value of the plan. This occurs at the same time many employers (and possibly the Federal government in future decades) have adopted reduced roles in the financial lives of their employees (all citizens) during retirement. Alas, as more individuals are forced to adopt an active role in the management of their retirement savings, the maze in which they must navigate is becoming increasingly complicated, with an expanding array of financial products to chose from, as well as treacherous, as exceptional volatility has taken all financial markets by storm.

Adding fuel to the fire is the (otherwise pleasant) fact that Americans are not only living longer than ever before, but staying active later in life. This combination requires additional savings and/or post-retirement income above prior-generations figures to ensure that one's standard-of-living is not jeopardized.

Not to be ignored is the threat of inflation, or the risk that the future purchasing power of a dollar will weaken. Even more troubling is the fact that historically one of the most inflationary sectors of the economy, health care, becomes an increasingly larger portion of one's expenditures later in life.

Despite such an ominous outlook for the millions of Americans hoping to retire within the next few decades, there are several reasons for optimism. The financial-management industry recognizes this changing environment and has adapted to better suit such needs. Federal lawmakers and regulators are also cognizant of the situation and have put forth legislation which

aims to assist with retirement saving. Lastly, the development of financial markets, products, and applications have made it so even the most casual of investors can achieve the diversification and exposure necessary to build and maintain an investment portfolio essential for an adequately-financed retirement.

It is the intention of this report to briefly touch upon the most common pure-retirement savings vehicles, the IRA and the 401 (k), in order to lay a foundation for the core topic: the target date fund approach to investing. This report aims to define and assess the benefits target date funds offer investors, and to evaluate the performance records and attributes of some of the leading funds in the industry. The issues discussed in this report include: investment diversification, asset allocation, risk-return orientation, the impact of expenses/fees, as well as target date appropriateness, misconceptions, and potential areas for reform.

The Individual Retirement Account (IRA)

There are two types of IRAs. The traditional IRA allows an investor (simply anyone with an IRA account) to contribute up to $5,000 per year and is tax deductible regardless of income, so long as the individual is not a member of a qualified plan (generally a 401(k) plan) and does not earn over $50,000 per year. For those single taxpayers making annually less than $50,000 in modified adjusted gross income, all $5,000 of an annual IRA contribution is tax deductible. Once placed inside an IRA, the money can be invested in a variety of financial assets. Investors are able to buy and sell investments inside their IRA and do not have to pay any related taxes (such as capital gains taxes) they would otherwise be subjected to if the investments were held outside of the IRA. Once inside an IRA however, an investor is not allowed to withdraw the money until the age 59 ½, or be faced with a 10% penalty tax. At 59 ½, an investor can begin to withdraw

from his or her IRA but must pay taxes on the amount contributed into the fund over the years (but not on the amount earned as profits from the investments).

The Roth IRA

The second type of IRA is the Roth IRA, which also allows an individual to invest up to $5,000 per year. Unlike a traditional IRA, the Roth IRA does not allow for a tax deduction upon contribution. However, the Roth IRA avoids taxes on any contributions later on at the time of withdrawal. While the investor does not lower his or her tax bill at the time of the contribution (during his or her working years), he or she pays no taxes when withdrawing the money after turning 59 ½.(Barron's Dictionary of Finance and Investment Terms, 2007) This trade-off is nearly always the better of the two options since historically tax rates increase over time and individuals move upwards into higher tax brackets, thus resulting in their paying a greater tax bill later in life under the traditional IRA setup than if using the Roth IRA model.

The 401(k)

401(k) plans allow employees, as an alternative to receiving taxable income as either compensation or a bonus, to elect to contribute pretax dollars to a qualified tax-deferred retirement plan. Over the years, the 401(k) model has evolved to allow after-tax dollars to be contributed as well, whereby future earnings are shielded from taxes. To encourage employees to contribute to their 401(k), employers are able to match employee contributions. Employees are given discretion over how they wish to allocate their contributions once inside their 401(k), though their plan sponsor (often their employer) will provide a set of options to choose from. The majority of 401(k) plans are comprised of investments in equity and fixed income mutual funds, money market funds, and for those employed at larger firms, their own corporate stock. The options made available to participants are monitored by a fiduciary committee, who often

contracts with a financial advisory firm, who actively manages the plan portfolio (Barron's Dictionary of Finance and Investment Terms, 2007).

Beginning in 2006, Roth IRA-style 401(k)s began to be offered, whereby contributions were taxed prior to placement into the 401(k) but were not taxed at the time of withdrawal. Like IRAs, investors cannot withdraw money from their 401(k) until age 59 ½ or face a 10% penalty tax. Also, investments inside a 401(k) are immune from capital gains and dividend taxes, thus enabling investors to trade without concern of the tax impact. Currently employee contributions into a 401(k) are capped at $15,000 per year. However, this amount is revised frequently to account for inflation.

IRA and 401(k) Participants

The diversity among participants' approaches to their IRAs and 401(k) is immense. However, to crudely divide participants into three classes helps to shine light on various complexities in determining how to best serve all.

The Good

Many approach retirement investing with enthusiasm. Scores will strive to make sizable and regular contributions, take advantage of employer-matching programs, and diligently evaluate the investment options available to construct a portfolio which they believe to be the most appropriate given their financial circumstances. Barring unfavorable market conditions or an inappropriate embrace of risk, most likely these participants contribute and earn enough in their IRA and 401(k) plans that by retirement they have an ample nest egg to fund their golden years.

The Bad

For a good number of workers, especially those in the early years of their career, the decision of how to build and supervise their retirement investments registers as both daunting and burdensome. Complicating the matter is the fact that deciding how to best invest can sometimes be an agonizing ordeal. Few young professionals have a solid understanding of financial markets and investment strategies, a conundrum that can cause some to elect to not invest. For those with a desire to invest, headlines of financial mayhem and of investors seeing their savings annihilated by the worst bear market since the Great Depression, make the perils of forking over hard-earned income, only to see it vanish, too dreadful to contemplate.

The Ugly

Others simply never bother to devote any time or energy to investing. According to Tara Bernard of *The New York Times*, "Many people are guilty of spending more time researching the purchase of a flat-screen television than their 401(k) investments." (2009) A preoccupation with the present, a failure to understand the tax benefits, and potentially lucrative advantages found through matching contributions, or simply an erroneous belief in their future abilities to afford retirement without a structured investment plan, are some of foremost reasons many abstain from contemplating retirement investing.

The Bottom Line

It behooves anyone planning for retirement to follow President Franklin Roosevelt's timeless advice that the only thing to fear is fear itself. In the long run, the probability of being financially sound is much greater for those with an investment plan. Fortunately, a little insight into the available tools can yield substantial rewards for any investor. Having a working understanding of

the IRA and 401 (k) options is crucial; nevertheless, to maximize success when investing for retirement, it is vital that one have his or her investments properly situated once they have been contributed into a retirement-investment vehicle. In other words, just having the tools (the IRA and the 401(k)) does not insure that one can build a successful investment portfolio.

Alas, orchestrating this maneuver can seem daunting to even the most determined investor. If experienced, educated professionals routinely perform miserably, how can the everyday person saving for retirement possibly succeed? Fortunately, products exist which greatly ease the burden facing retirement investors. In addition, the Federal government has intervened and acted in a manner that assists even the most reluctant investor. Before diving deep into the products available to investors, one must understand a key rule affecting the 401 (k).

Qualified Default Investment Alternative

To alleviate the risk that those who neglect to manage their 401(k), and thus are destined for a meager post-employment livelihood on account of an insufficient pension, the U.S. Department of Labor in 2007 issued requirements for a Qualified Default Investment Alternative (QDIA). The QDIA requires that investors who decline to personally manage their 401(k) be defaulted into an investment vehicle, "designed to provide varying degrees of long-term appreciation and capital preservation through a mix of equity and fixed income exposures". (Russell's Approach to Target Date Funds, pg. 12)

Core Investment Principles and the QDIA

The QDIA mandate of a mixed equity and fixed income portfolio structured to earn returns without excessive levels of age-appropriate risk, echoes the core principles central to any successful long-term investing philosophy. Historical analysis strongly prescribes that portfolios

consist of the following investments: slated to seek real returns while mitigating as much risk as possible, diversified across multiple asset classes, exposed to various markets across the globe, and ever mindful of fees and expenses. Financial professionals advise investors to hold both equities and fixed income products, and to have holdings in the sub-sections (i.e. different cap sizes and credit qualities) of each asset class. Furthermore, investors should tailor their portfolios to reduce risk exposure and adopt a capital preservation strategy, as opposed to a capital creation strategy, as retirement nears. Investors active in the construction and oversight of their own 401(k) can attempt to do so themselves, most often by building a portfolio of diversified mutual funds. For those applicable to the QDIA option, the investment vehicle of choice is likely the target date fund.

Target Date Funds

Target date funds are actively managed mutual "fund of funds," specifically engineered to allocate one's retirement savings towards an investment portfolio that optimizes potential return while minimizing risk, given the amount of time until the fund's target date. A "target date" is simply the predicted year (or as close as possible) of retirement for the fund's investors. Target date funds differ from traditional mutual funds since rather than being managed with a stagnant asset allocation (which is traditionally more-or-less tied to an underlying index or sector), their composition is diversified and adjusted periodically to lower projected levels of risk. Nearly all target date funds are comprised of investments in the major asset classes such as equities (US, international and emerging markets), fixed income (government and corporate bonds), and even real estate (REITs).

The Target Date Fund Industry

The meteoric rise in the popularity (number of investors), size (assets under management), and options (number of funds available) is staggering. From 2005 to 2008 total assets in target date funds swelled from $71 billion to $164 billion. (*The Wall Street Journal*, 2009) Since 2006 the proportion of 401(k) assets allocated to target date funds has mushroomed by nearly seven-fold from 3% to 20% in 2009. It is estimated that by 2015 one-third of all 401(k) assets will be held in target date funds. (*The Baltimore Sun*, 2009) Every major mutual fund firm and several of the nation's largest insurance providers now peddle target date funds, which are available for workers planning or projected to retire today to beyond 2050.

Ten Largest Target Date Fund Families by Assets (as of 7/31/09)

Fund Company	Target Fund Title	Assets Under Management (in $ millions)
Fidelity	Freedom Series	50,446.6
T. Rowe Price	Retirement Series	21,947.2
Vanguard	Target Retirement Series	13,912.9
Principal	Life Time Series	11,291.4
Wells Fargo	Advantage DJ Target Date Series	2,748.1
Schwab	Managed Retirement Trust	2,545.5
American Funds	Target Date Retirement Series	2,407
TIAA-CREF	Lifecycle Series	1,751.1
John Hancock	Lifecycle Series	1,096.9
Alliance Bernstein	Retirement Strategy Series	896.2

Note: All data tables in this paper include data taken from Morningstar® Analyzer in August/September, 2009

Target date funds originated in the 1990s to tackle the endemic practice of investors neglecting to prudently monitor their 401(k). As sadly the case is still today, many participants developed "worker inertia" or the failure to adjust their 401(k) portfolios as they matured towards retirement. (*The Baltimore Sun, 2009)* The thesis behind target date funds was to offer investors

a product that could be substituted for a host of other holdings which would eliminate the need for participants to develop informed decisions and make periodic adjustments on their own.

The Benefits of Target Date Funds

The benefits attained through investing in a target date fund, rather than an ensemble of individual mutual funds, are numerous. It is chiefly due to this simplification of investing that target date funds have became the preferred investment solution for many plan sponsors to satisfy the QDIA requirement.

Ease of Management

Perhaps the most important reason why a placement in a target date fund is appropriate for an investor's 401(k) is ease of management. An investor simply selects the target date nearest to their projected year of retirement and deposits their contributions into the fund. There is no need to evaluate numerous individual funds, the attributes of various asset classes, or perform regular due diligence for a stable of funds and fund managers. Target date funds can be thought of as a prudent "one-stop" investment vehicle since an investor contributes to a single fund yet is not subjecting him or herself to the punitive consequences that too-often ensnarl single vehicle investments. This benefit is made possible due to a fund-of-funds composition that allocates a participant's investment among a potpourri of asset classes and managers.

One-Step Diversification

As a fund-of-funds, target date funds expose investors to numerous other funds encompassing a wide spectrum of asset classes. This approach provides several advantages. First, by being comprised of many small investments in a multitude of funds, the risk of being precariously

over-exposed to an underperforming fund is mitigated. It is common for target date funds to have a total holdings quota greater than 20, with some, such as Russell Investment's Life Points® Series, having over 150. A fund could collapse completely, but if it is merely $1/100^{th}$ of a portfolio, the failure would be barely felt. Simply put, target date funds offer investors a simple way to alleviate the chance of a "few bad apples souring" an investor's entire 401(k) pie.

Second, having numerous placements makes it likelier (but does not guarantee) that a desirable asset allocation will be achieved. A bevy of funds allows for an equity allocation consisting of US, international, and emerging market stocks, which can be further varied between small, mid, and large market capitalization companies, and can also ensure a fixed income allocation containing government (US and international) and corporate bonds of varying credit qualities. Historical analysis supports the premise that diversification leads to greater cumulative returns and lower volatility. With such an expanse of individual asset slices dividing up an investor's portfolio, a single-source to allocate contributions is a significant boon.

Third, numerous small placements allow for target date funds to have more than one holding in an individual sector or asset class, which enables the target fund manager to stem losses without compromising overall diversification. In other words, the fund of funds model empowers fund managers to be more discriminative when making placements without sacrificing diversification or risk aversion. Knowing and selecting a mutual fund that will at least match (hopefully outperform) its peers is a difficult process since "average" implies 50% of funds performed worse. The fund-of-funds approach places the onus on the target date fund manager to decide when to hire and fire sub-advisors. Competent managers will have another fund ready to absorb the cash from the fired manager. Not only is the process not the responsibility of the investor but

the investor never loses exposure to what could have been otherwise a well-performing asset class.

Risk-Return Orientation

Target date funds are much more than an amalgamation of mutual funds comprised for the sake of diversity. They are constructed in a manner that aims to match potential performance (total return), with an acceptable level of volatility (risk), given the length of time until the target date. Unlike traditional mutual funds or fund-of-funds, target date funds have an active risk profile that adjusts overtime to match what is in the best interests of its investors. This "risk-return" relationship determines both asset allocation and sub-sector/manager diversification. It is this fundamental commitment to evolving risk management that is perhaps the greatest potential benefit target date funds provide since time and time again, a hearty portion of individual investors have proven to lack a reasonable understanding of risk.

Active Management

The majority of target date funds are actively managed. Active management is perceived to add value since competent oversight enables the opportunity to outperform market averages earned through passive management. Furthermore, active management better ensures a portfolio is protected in real-time to precarious levels of risk. The fund-of-funds nature of target date funds enhances both the alpha[1]-adding potential of the fund manager with the expertise of the numerous sub-advisors. Several target date funds subscribe to a "best in breed" style of manager selection when picking their underlying mutual funds. Regular review and scrupulous oversight

[1] "Alpha" measures the value added by an active manager by comparing the fund's performance to a similar (benchmark) passive index. An alpha above 1 indicates returns above the benchmark index.

guarantees investors that only the firm's best (or industry best for commingled funds) are sub-managing their investments.

Automatic Rebalancing

A staple of successful investing is the practice of routinely rebalancing a portfolio. Rebalancing makes certain that profits are realized on a regular basis since gains are sold in order to produce cash to bring other segments of a portfolio up to their targeted level. Doing so insures that a diverse portfolio, better suited to profit in a wide range of markets and withstand periods of subpar sector performance, is perpetually maintained. Sadly, too few individual investors bother to rebalance. Among those that do, few do so on a consistent basis and are likely to delay rebalancing and instead chase elusive everlasting gains, only to suffer amidst the capital-destroying turbulence of market corrections. Target date funds rebalance automatically and regularly, maintaining research-developed diversity across numerous asset classes. Target date funds are not homogenous however, and do differ in how often they rebalance and in the degree of flexibility a manager has in overweighting an asset class. Therefore it is vital investors evaluate prospective managers to find a fund that offers favorable conditions.

Components of Target Date Funds

There are distinctive attributes that target date funds have that differentiate them from other investment products and offer investors enhanced wealth-creating opportunities. In other words, target date funds are not designed to be bundles of mutual funds with an additional fee. Target date funds are constructed in a manner to maximize overall returns by the target date. This involves taking both overall portfolio diversification and asset allocation into consideration when determining what number and type of funds to include, as well as the amount of time outstanding

until the target date is reached. Furthermore, target date funds are not stagnant funds but have their fund holdings and asset allocations routinely altered.

The Glide Path

The hallmark of all target date funds and their approach to risk-conscious yet performance-driven investing is the glide path. A glide path is simply the equity allocation of a fund at any given point in time. Glide paths are routinely displayed graphically as an inverse curve with "equity allocation" as the Y-axis metric and time from retirement (in reverse order) as the X-axis scale. All funds subscribe to the philosophy that investors furthest from retirement (therefore on the left-most portion of the graph) have the greatest "risk tolerance" (in other words they can accept the greatest equity allocation and hence are furthest up the Y-axis). Overtime an investor's risk (equity) exposure is reduced as the target date comes nearer, causing the graph's curve to trend lower further along on the X-axis. The "glide" in glide path depicts the intent of reducing volatility as retirement nears, thus diminishing uncertainty in the final years of one's career. The steepness of the graph (how far and how quickly it declines from high to low equity) crudely indicates how "aggressive" the fund is in maintaining a riskier asset allocation. Conversely, the more level a glide path is typically indicates a target date fund that is more "conservative" and risk-adverse.

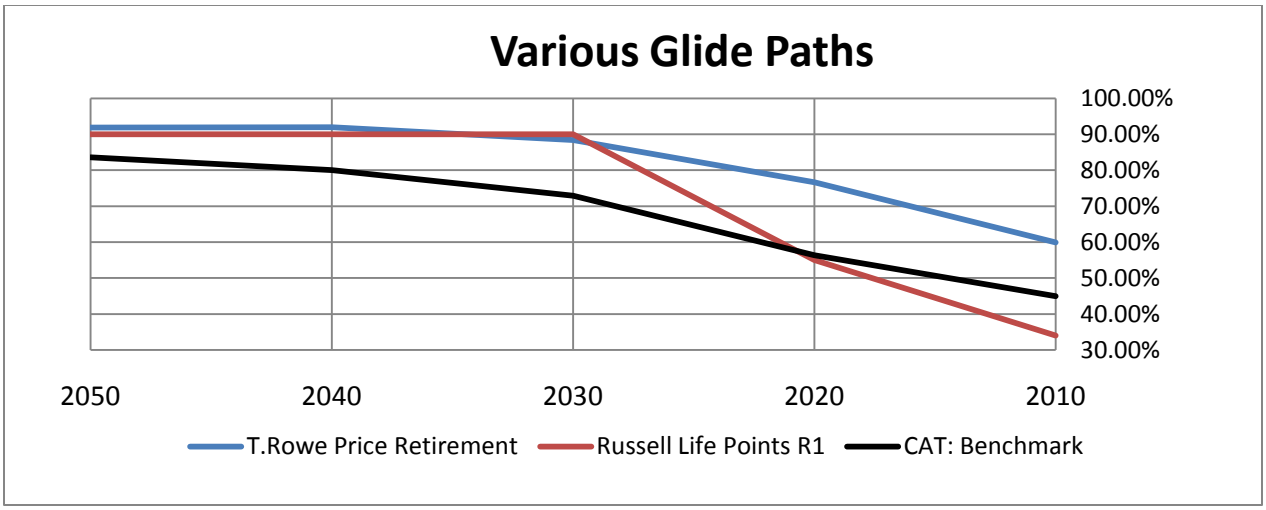
Discrepancies

Just like all roller coasters differ in their ascents and plunges, no two glide paths deliver the same ride towards retirement. Whereas instability and uncertainty are desired from the former, the latter should deliver a pleasant, less volatile experience. Modern portfolio theory advises that the bulk of an investor's returns, on a percentage basis, are best earned in the early stages of

investing since greater returns nearly always necessitate greater risk. If an investor is to suffer losses brought on by higher levels of risk, it is best to do so before cumulative capital is too great. Losing 50% of a small portfolio is much easier given approximately 30 years to recuperate than 50% of a much larger portfolio in only three years (and certainly less anxiety-provoking!). All glide paths abide by this notion; differences arise in what rate (steepness of the curve) risk should be reduced.

Some managers will argue that it is best to maintain a high equity exposure for a prolonged period to enable investors to accrue greater returns (since equities historically outperform fixed income), and then to tailor back sharply in the years directly preceding retirement. Other managers cite the unpredictability of financial markets as justification for a gradual shift towards stability associated with fixed-income since the odds of having prolonged periods of positive equity returns are too uncertain in contrast to the heightened levels of risk they present.

Important, as well, is the overall size, in percentage terms, of the shift from equity to fixed income. Theory suggests a wide range offers the best opportunity for cumulative returns, since a larger equity position historically corresponds with greater capital returns while a hefty fixed income allocation preserves a portfolio's balance. This is most true when such allocations are held at the correct points on the glide path. The devil, however, is in the details or the timing of each.



The illustration displays how glide paths differ in starting levels of equity, ending levels, and rate of change.

A study of the equity glide paths of the 13 largest target date fund companies found equity variations ranging from nearly 1400 basis points (BPS) in 2050 funds (furthest from retirement) to over 3200 BPS in 2010 (nearest to retirement)! The category benchmark (the median taken from all target date funds) illustrates a glide path beginning with a maximum equity allocation of 83.55% and gradually subsiding to 44.99% at retirement. Allocations differed by as much as 1145 BPS amongst 2050 funds to an incredible 1854 BPS for 2010 funds. In theory 2010 should have the smallest variation given the heightened levels of risk aversion so near the target date. The middle period (2030) shows equity allocations differing by 1720 BPS, which suggests managers have starkly different attitudes towards appropriate levels of risk. While 1800 BPS spreads in underlying equity exposure are intrinsically significant, no two equity or fixed-income allocations consist of the same holdings. As such, a true understanding of the risk-return characteristics of any glide path can only be reached after analyzing the specific asset classes in each fund.

Equity Allocations

Fund Manager	2010	2020	2030	2040	2050
Fidelity Freedom	50.00%	65.00%	78.00%	85.00%	89.00%
T. Rowe Price Retirement	59.93%	76.64%	88.43%	91.97%	91.91%
Vanguard Target Retirement	52.10%	68.94%	83.77%	89.69%	89.50%
Principal Life Time Inst	45.93%	60.14%	73.16%	80.90%	87.46%
Wells Fargo Advantage A	26.45%	49.80%	74.76%	88.04%	88.76%
American Funds Target Date R1	56.36%	69.63%	78.80%	81.08%	81.12%
Barclays S&P Target Date	50.00%	70.00%	83.00%	90.00%	NA
TIAA-CREF Life Cycle Inst	52.32%	57.81%	83.14%	89.09%	89.16%
John Hancock Life Cycle 1	55.39%	76.48%	90.36%	91.33%	NA
Alliance Bernstein Retirement Strategy Adv	66.35%	78.85%	88.71%	92.96%	92.95%
JPMorgan Smart Retirement Inst	42.10%	64.80%	79.40%	83.20%	82.80%
Schwab Managed Retirement Trust	43.26%	66.74%	81.60%	90.50%	95.00%
Russell Life Points R1	34.00%	55.00%	90.00%	90.00%	90.00%
CAT: Benchmark	44.99%	56.34%	72.89%	80.07%	83.55%

Hidden Risk

The variety among glide paths provide an opaque assessment to risk and return probability since there is no guarantee select fixed income investments are less risky than some equity positions. It is commonplace for a fund to have a 50/50 equity/fixed income allocation but can vary significantly depending on the specific types of stock and bond holdings. For example, a 50% equity allocation can be divided evenly between emerging markets, small cap US, and large cap international stocks, whereas another fund could hold only large cap US stocks in its equity allocation. Moreover, high fixed-income allocations which on a glide path appear less risky than

equity-heavy allocations can be strikingly risky if substantial holdings of high yield bonds exist. While such stark contrasts rarely exist, small variations are commonplace. Over the duration of 30 years such disparities can lead to significant long-term return discrepancies.

Constructing the Model Target Date Fund

Several vital characteristics exist which should be scrutinized when determining whether a target date fund is worthy of selection. The following describes in greater detail each feature and why each is important.

Asset Allocation

Numerous studies have concluded that the primary ingredient for greater aggregate returns overtime is asset allocation. The tendency for equities to post superior returns compared to fixed income products, while fixed income products historically are less volatile than equities, creates a reality in which investors profit for having exposure to both. The overarching question, however, is just what the best ratio of stocks to bonds is, given the amount of time until the target date.

A fund's glide path should begin with a substantial equity position and maintain such for the better part of the first half of the glide path. A substantial period of elevated equity exposure increases the probability that heightened volatility will yield positive returns since historically markets trend higher more often than lower. Too brief of a period and a fund runs the risk of being caught in a bear market, and subsequently forfeits the bulk of the gains to be had, once the market recovers since equity exposure is lessened. The risk that a fund experiences a bear market towards the latter stages of their high-equity allocation period does exist, but the overall effect should be mitigated by above-average returns earned prior to the bear market, made possible

only through the large equity stake. In simple terms, the probability of excess returns made possible through greater risk increases the longer such an equity-risk heavily allocation is maintained.

To help offset the risks associated with a prolonged high-equity allocation and to "lock-in" excess returns earned due to such risk, a fund should adopt a heavy fixed-income position towards the latter stages of the glide path. With retirement quickly approaching, not only is the risk of negative performance mitigated, but the steadiness of fixed income relieves anxiety and better assists participants in managing their retirement financing.

The Impact of Cash Flows

Another argument supporting such a glide path concerns the rate of contributions (cash flows) into a 401(k). At the earlier stages of the glide path, contributions are generally smaller as participants earn less and devote a greater share of their earnings to expenditures, such as the purchase of a home or paying off debt. A higher equity allocation, therefore, is desired to maximize smaller overall contributions. (Given the significant amount of time until retirement, the heightened level of risk associated is considered negligible.) As time passes and a participant begins to contribute more in dollar terms (and often in percentage terms, as well) to their 401(k), the need to maximize the return of each contributed dollar is reduced, and a greater emphasis develops to protect the value of each invested dollar. To facilitate this shift a more risk-adverse allocation is adopted. The engineers of the Russell Investments Life Points® target date series describe this common progression as the maturity of a participant's "human capital" into financial wealth. At the earlier stages of the glide path, financial wealth pales in comparison to human capital (present value of remaining savings flow, discounted for risk), making it more

advantageous for greater degrees of risk to be adopted since losses are more readily recuperated. Overtime human capital is realized as earned income and converted into financial wealth. Since an investor's human capital is reduced as time goes by (fewer years left in his or her career), preservation of financial wealth is increasingly important. At the target date, financial wealth is equal to the aggregate of all realized human capital plus the returns earned through investments. (Russell's Approach to Target Date Funds, 2008)

Prolonged excessive risk exposure can have an additional adverse effect by pairing a larger dollar amount of contributions plus prior returns with elevated risk levels, creating the potential for greater dollar loss. As a participant contributes more dollars to their 401(k), the burden placed on the fund's performance to generate large returns is lessened, since more contributed dollars means a smaller overall rate of return is needed to come to the same ending balance. While funds are evaluated due to their risk-adjusted potential returns, one cannot neglect factoring in the impact of cash flows (contributions). With this in mind, the glide path should seek to lessen risk as cash flows increase.

Diversification

Target date models that incorporate a wide variety of asset classes are most desirable. In general, an attractive fund will have holdings in both US and international equity markets, including emerging markets. Funds should also have exposure to small, mid, and large cap stocks, as well as both growth and value equities. Emerging market and small cap stocks should hold a greater weight on the far-dated position of the glide path, and should diminish but never disappear over the rest of the glide path.

The detailed composition of the "perfect" allocation model is debatable as other factors such as fees and performance of select funds will impact returns. Moreover, it behooves investors to examine past allocations to determine the degree of tactical shifts made by a fund manager. Overzealous shifts in-then-out of an asset class can signal flaws in the underlying asset allocation model, or attempts to capture short term opportunities.

Target date funds that invest among a cache of sub-advisors from outside their own firm are more appealing than funds using managers from a single firm. A diversified portfolio provides optimal utility when the most competent managers, in a particular sector, are selected. For instance, Fidelity has a reputation as a first-rate growth stock manager but underperforms in fixed income. PIMCO is viewed as the world's top bond manager but offers very few equity funds. To invest in a fund that exclusively uses one fund family for all of its holdings would be inappropriate whereas a combination of managers presents a more favorable scenario.

Fees and Expenses

Even the smallest of differences in fees can have the greatest of impacts over the course of an entire career. Fees should be viewed in connection with returns to evaluate whether any premium is indeed worthwhile. Most active managers are within the 60-90 basis points range for annual expenses. Given some of the sub-advisors will have expenses >1% (small cap, international equity funds), multi-manager funds all-inclusive rates can be even more appealing. For the most cost-sensitive investor, target date funds holding only passive index funds, such as Vanguard and Barclays, provide a cheap option with fees under 30 basis points per year.

Annual Net Expense Ratio Ranges (% of assets under management)

Fund Manager	Fee Ranges (%)
Fidelity Freedom	0.64-0.82
T. Rowe Price Retirement	0.61-0.73
Vanguard Target Retirement	0.19
Principal Life Time Inst	1.07-1.20
Wells Fargo Advantage A	0.94-0.98
American Funds Target Date R1	0.85-0.91
Barclays S&P Target Date	0.29-0.31
TIAA-CREF Life Cycle Inst	0.66-0.72
John Hancock Life Cycle A	1.36-1.41
Alliance Bernstein Retirement Strategic Adv	0.64-0.76
JPMorgan Smart Retirement Inst	0.66-0.86
Schwab Managed Retirement Trust	0.45
Russell Life Points R1	0.68-0.86
CAT: Benchmark	1.13-1.27

Long Term Fee Impacts

NEGATIVE impact, as % of total compounded assets due to expense ratio					
Rate (basis points)	**5 Years**	**10 Years**	**20 Years**	**30 Years**	**40 Years**
30 BPS	1.49%	2.96%	5.83%	8.62%	11.32%
60 BPS	2.96%	5.84%	11.34%	16.52%	21.39%
90 BPS	4.42%	8.64%	16.54%	23.76%	30.35%
120 BPS	5.86%	11.37%	21.45%	30.38%	38.30%

$=1- (1*((1+r))^{t} / (1*(1+(r-exp))^{t}$; when r= rate of return and exp= expense rate

The chart illustrates the capital eroding impact of different expense rates over various time spans. For a participant 40 years from retirement, the potential savings, as a percentage of compounded

assets (all other things being equal), when investing in a target date fund with an expense ratio of 0.30% of total year-end assets instead of 1.20% is 26.98%! To compensate for the adverse impact of a 120 BPS yearly fee, an investor would need to earn nearly a 10% premium (1% more overall) each year than the investor with only a 30 BPS fee.

Today only target date funds constructed using passive index funds have fees as low as 30 BPS. For fee-conscious investors this option is appealing. The main argument to be made for selecting target date funds comprised of actively managed mutual funds is the potential of market outperformance. Alas, the great debate of "active v. passive" funds comes down to the selection of mutual funds with managers able to outperform the indices, and to do so by a large enough margin to offset any expense premium for this "value-adding management". Common sense suggests that target date funds that practice a "best of breed" style of management, enlisting an army of sub-advisors from a host of fund companies, would thereby be the best bet. As noted previously, no single fund management firm excels by a wide-enough margin in every aspect of the asset-class universe to float a target date fund composed solely of in-house funds that on a consistent basis would outperform a well-managed fund with several sub-advisors. It is important to note that the obligation placed on the target date fund manager charged with selecting, monitoring, and if need be terminating sub-advisors is doubly important since not only must they select funds that outperform the index after fees, but that collectively, all holdings produced a return that compensates for the target date fund provider's fee premium.

Simulations and Real Results

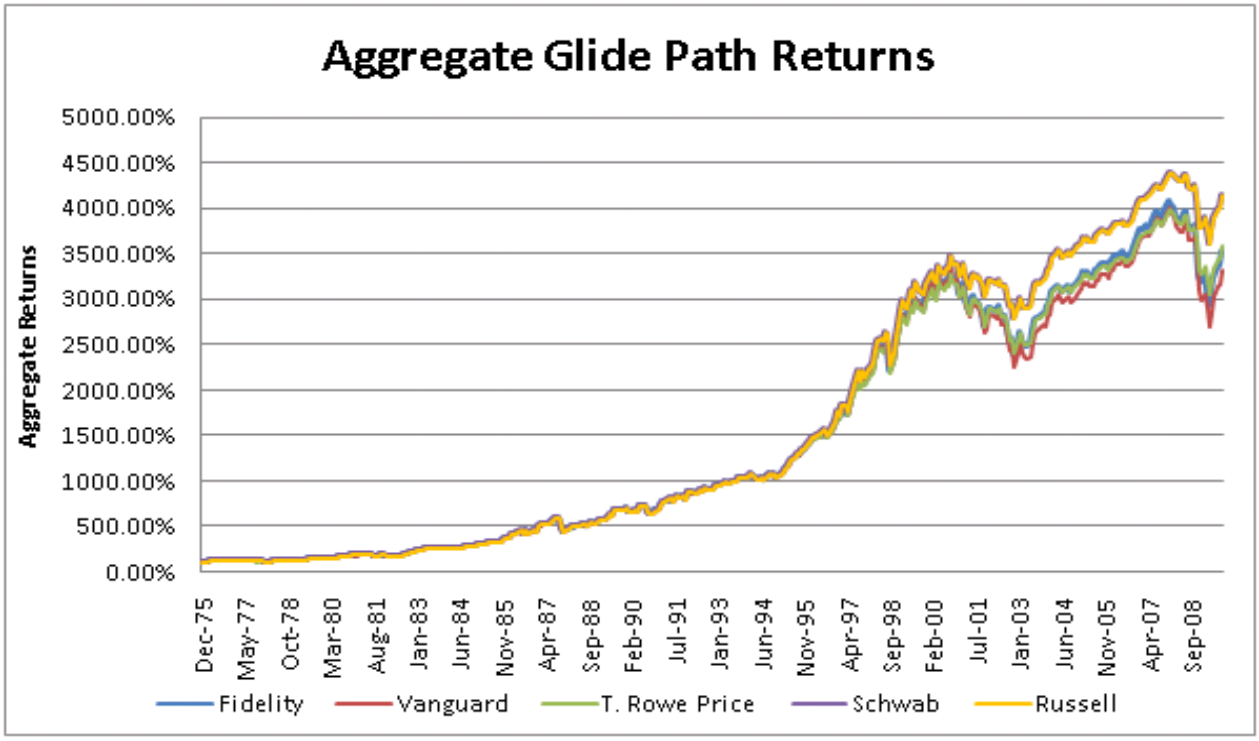
From among the plethora of target date fund managers, this report will examine the options available from the industry's 13 largest fund families. Analysis will be conducted in two ways: First, to test the long-term feasibility of the various glide paths currently implemented by actual target date funds and to produce strong returns with minimized risk, several glide paths will be recreated using the S&P 500 and the Barclays US Aggregate Bond indices. Second, actual performance data from the target date funds will be analyzed. The target date funds included in the survey were: Fidelity Freedom Series, Russell Life Points, Schwab Managed Retirement Trusts, T. Rowe Price Retirement, and Vanguard Target Retirement.

Glide Path Simulation

The brevity of the target date fund industry makes a thorough historical analysis with actual performance data unachievable. This reality is unfortunate since the long-term nature of target date funds warrants long-term figures. To compensate, current glide paths were recreated using the S&P 500 and Barclays US Aggregate Bond indices, going as far back on the glide path as data allows, January 1976 (33 ½ years). Performance and volatility data were then calculated. Understandably, the derived cumulative results will not match actual figures since no inputs were made for expense fees and varying rates of contributions. Furthermore, target date funds hold a diverse batch of funds in several asset classes which would have yielded different returns than just the two indices. The intent of the simulation is merely to assess how several simplified glide path philosophies would have performed historically. **To re-emphasize, results from this simulation are in no way, shape, or form *actual* returns earned by any actual fund.**

Test Results

The results attained validate the theory (page 14) that prolonged elevated equity allocations, followed by swift and significant transitions into a majority fixed-income position, result in greater aggregate returns. The top performing glide path, that of Russell Investments, returning a cumulative total of 4147.36% since January 1976, held a 90% equity allocation for the first 23 ½ years, before scaling back to 55% for the next five years, and then 34% for the final five years preceding the target date. Furthermore, the worst performing glide path, that of T. Rowe Price, held a similar high equity stake (88%-92%) for the first 20 years, but spent the next five years at 77% equity and the final five years at 60% equity. As a result, returns only amounted to 3321.13%. The severity of the bear market afflicting equities during 2008 and early 2009 corroborated the philosophy of holding oversized fixed income investments during the late stages of the glide path to minimize losses. A glide path with a 66% fixed income stake for the final five years (that of Russell Investments) only lost 11.2% from July 2008 to March 2009, whereas a glide path 50% equity (that of Fidelity Investments) declined 18.7%. An added bonus, again due to the bear market, was that the glide paths with the greatest fixed income exposure out-earned the rest on a three and five-year basis. The 66% fixed income glide path posted a total return of 19.4% during the final five years whereas the 60% equity glide path only earned 11.8% total return.



Aggregate Returns, January 1976-July 2009

Fidelity	Vanguard	T. Rowe Price	Schwab	Russell
3379%	3522%	3321%	3601%	4147%

Equity Allocations

Fund Manager	2010	2020	2030	2040	2050
Fidelity Freedom	50.00%	65.00%	78.00%	85.00%	89.00%
Russell Life Points R1	34.00%	55.00%	90.00%	90.00%	90.00%
Schwab Managed Retirement Trust	43.26%	66.74%	81.60%	90.50%	95.00%
T. Rowe Price Retirement	59.93%	76.64%	88.43%	91.97%	91.91%
Vanguard Target Retirement	52.10%	68.94%	83.77%	89.69%	89.50%

The graph on the preceding page illustrates how variations in the final years of the glide path make the greatest impact in terms of overall cumulative performance, all asset allocation models more-or-less produce like returns until approximately 10 years prior to the target years.

Key Volatility Metrics of Glide Path Models

Glide Path	Standard Deviation	Positive Months	Negative Months	Highest Return	Lowest Return
Fidelity	13.27%	255	148	11.63%	-17.76%
Russell	13.62%	253	150	13.43%	-21.52%
Schwab	13.75%	255	148	12.29%	-19.14%
T. Rowe Price	14.23%	252	151	12.19%	-18.93%
Vanguard	13.89%	254	149	12.19%	-18.93%

In terms of volatility, the glides were mostly comparable with fund families with greater overall equity exposures having slightly higher standard deviations. Overall, no one glide path was profoundly more volatile than another.

Actual Fund Results

An appropriate step for any prospective target date fund investor is to analyze actual results. Only through this undertaking can one determine the competency of a fund manager to not only design but actively manage a fund. Perhaps a blessing in disguise, the volatility of the past year or so provides investors with an auspicious viewing of a fund's aptitude to limit losses in a market free-fall, and then harvest hopefully bountiful gains and grab a bull market by its horns.

1 Year Returns (as of 7/31/09)					
Fund Manager	2010	2020	2030	2040	2050
Fidelity Freedom	-9.15%	-13.69%	-17.67%	-19.28%	-20.76%
Russell Life Points R1	-6.00%	-11.80%	-20.66%	-20.54%	-19.54%
Schwab Managed Retirement Trust	-7.64%	-12.95%	-16.60%	-18.50%	-19.33%
T. Rowe Price Retirement	-8.32%	-12.67%	-15.92%	-16.69%	-16.74%
Vanguard Target Retirement	-7.28%	-11.29%	-15.49%	-16.57%	-16.67%
CAT: Benchmark	-9.15%	-12.94%	-16.82%	-18.49%	-18.79%

The 12 month period from July ‘08 to July ‘09 left all funds lower for the period. With the exception of the Fidelity Freedom Funds Series, all other fund families were able to beat the Morningstar category benchmark in at least one of the five target fund yearly categories. Russell, with its strong fixed income position had the least losses among target year 2010 funds. Vanguard, with the most conservative asset allocation (fewest equities) for the remainder of the glide path set the trend for the other target date years.

Three Year Performance

3-Year Returns (as of 7/31/09)					
Fund Manager	2010	2020	2030	2040	2050
Fidelity Freedom	-0.61%	-2.30%	-4.01%	-4.78%	-5.39%
Russell Life Points R1	0.18%	-1.90%	-5.71%	-5.81%	NA
Schwab Managed Retirement Trust	-0.82%	-3.19%	-4.95%	-5.81%	NA
T. Rowe Price Retirement	-0.15%	-1.93%	-3.25%	-3.65%	NA
Vanguard Target Retirement	0.61%	-1.26%	-3.16%	-3.71%	-3.74%
CAT: Benchmark	-0.74%	-3.02%	-4.73%	-5.44%	-6.43%

The severity of the late ‘08-early ‘09 market meltdown rewarded those funds with lower equity exposures by a great enough degree to influence 3 year returns as well. All fund families outperformed the benchmark in at least two of the target years, with the exception of Schwab.

To prevent redundancy, a more detailed analysis of each individual fund’s performance, as well as holdings, diversification, fees and expenses is attached to the end of the report.

Evaluating the Leading Funds: Picking a Number One

After diligently analyzing the important attributes of the 13 industry-leading target date funds, it is the opinion of this author that the Russell Investment’s Life Points® Series target date family is the best choice for the average 401(k) participant. Russell’s combination of diversification across the widest assortment of asset classes, the top performing back-tested glide path model, and a “best-of-breed” fund composition, with exposure to traditionally the best mutual fund managers for their respected market niches, presents the most compelling argument for future outperformance with minimal long-term risk.

Some investors may call attention to Russell’s underperformance over the past one and three-year periods. Given the extreme volatility of the past 18 months, and the fact that target date funds are long-term investment vehicles designed not to excel in any one market but to perform modestly (compared to other investment strategies) in the majority of market conditions, it is much more relevant to evaluate historic re-created results. When Russell’s core allocation strategy was applied to the past 33 years of market conditions, Russell by far outperformed its peers in overall returns while being moderate in terms of volatility. Fee wise, Russell is

comparable with the competition, despite the fact that Russell is a commingled fund with all outside sub-advisors.

Criticisms of Target Date Funds

Target date funds are not immune from the tendency for financial products to elicit the rage of both investors and regulators who believe they inappropriately cause harm. Given the relative infancy of the industry, it is reasonable to expect significant amendments to be made as inefficiencies are discovered and corrected. Nonetheless, it is reasonable to expect that target date funds will become a mainstay of the financial product industry, and subsequently expand in size and importance.

2008 Performance

The tsunami of agony which was 2008 left its mark on target date funds. Even those funds with a diverse allocation and sizable fixed income proportions suffered losses as every asset class (except US Treasuries) lost value. Holding true to form, later-dated funds (2030 and beyond) had greater losses than nearer-date funds, on account of greater equity holdings. Unfortunately, some near-date funds registered excessive losses which far exceeded risk expectations and exposed egregious flaws in the investing philosophy of some managers. The most shocking fund was the Oppenheimer Transition® 2010 target date fund that lost an "eye-popping" 41%, underperforming the all-equity S&P 500 which only declined 37% in 2008. (*The New York Times*, 2009) The average 2010 fund lost around 22% in 2008; the average 2015 fund fell 28%, according to Morningstar. (*The Wall Street Journal*, 2009) Though the declines were less than those of the major market indices, the reality that a large number of investors witnessed a quarter of their 401(k) disappear within 2-7 years of retirement is unsettling. Complicating matters is the

fact that the holdings of most 2010 and 2015 funds are not geared to grow fast enough to recoup such declines, especially if managers rehash their investment strategies to become more conservative for the remaining duration.

The following table shows the worst performing target date funds from September 2008-August 2009, relative to their category average. It should come as no surprise that Oppenheimer Funds became the poster child for target date funds gone wrong, though they were far from the only manager to perform miserably.

Worst Performing Funds, 8/31/08-8/31/09

Fund	2010	Fund	2020	Fund	2030	Fund	2040	Fund	2050
Oppenheimer Transition B	-25.38%	Oppenheimer Transition B	-23.85%	Oppenheimer Transition B	-23.48%	Oppenheimer Transition B	-21.08%	Oppenheimer Transition B	-20.89%
Alliance Bernstein Retirement Strategy B	-12.01%	Goldman Sachs Retirement Strategy R	-15.21%	Old Mutual Aggressive A	-18.29%	MFS Lifetime B	-19.84%	Legg Mason Partners Target Retirement C	-19.03%
Principal Life Time R1	-11.93%	Alliance Bernstein Retirement Strategy B	-15.20%	MFS Lifetime R1	-18.22%	DWS Life Compass C	-19.43%	Goldman Sachs Retirement Strategy R	-18.93%

Appropriateness

Common sense prescribes that no two investors are exactly alike. Furthermore, asset management firms have made billions of dollars pushing this notion to entice investors to invest in an ever-increasing catalog of funds and products marketed as applicable to some more so than others. In this spirit, how is it that employee "A" is automatically as well-suited for "Target Date Fund X" as employee "B", simply because they are projected to retire in the same year? Investors have their own individual financial characteristics that may or may not make a certain target date fund, or a certain target year, an appropriate investment. Take for instance employees

earning less than the average salary and relying on their IRA, 401(k) and Social Security for the majority of their retirement financing. It is in their best interest to have a target date fund with very limited equity holdings towards the near-date portion of their glide path to safeguard against a year like 2008 washing away their nest egg. Now consider a co-worker earning a much greater salary and holding numerous investments outside of their IRA and/or 401(k). This participant is able to weather a greater amount of risk associated with a meatier equity allocation in pursuit of a greater return.

Both employees in the above example have an IRA and 401(k) for the same reason: saving for retirement. However, their interpretation over what is the most suitable structure is fundamentally different. One wishes to avoid risk for the sake of having enough to at least make ends meet in retirement, while the other embraces a certain degree of risk if it brings with it sizable profits that will make retirement even cushier. The current format for most target dates is to put these two individuals in the same fund if their projected retirement date is the same. As a result, either one or the other, or possibly both, will suffer.

A simple way to solve this dilemma would be to have individuals who will rely more heavily on their IRA and/or 401(k) for retirement chose a target date earlier than their actual retirement, thereby avoiding the riskier end of the glide path and having more years with less volatility. Those employees relying less on their IRA and/or 401(k) for retirement would invest in a target date fund slated to mature after they retire, thereby spending as much time as possible at the equity-heavy end of the glide path. Two flaws impact this plan, however. First, such a scheme eliminates one of the most attractive aspects of target date funds: the ability for employers to implement the QDIA based on one's age or estimated retirement date. Second, and perhaps an even greater problem which afflicts all target date investors, is the reality that a participant's

aggregate financial picture is likely to change over the course of his or her career. An allocation to a glide path model which was appropriate originally can either be too risky or too conservative depending on one's overall wealth and retirement savings.

Misconceptions

Despite employee education sessions aimed at informing all participants of the structure, objectives, and risks associated with target date funds, many still have little comprehension of what it is their 401(k) is invested in. Not only do many not understand important concepts such as "glide paths", a shocking 38%, according to one survey, believe that their target date fund pays a guaranteed return! (CNNMoney.com, 2009) Misconceptions are understandable given that many invested in target date funds are so by default, and hence, gave little if any consideration to their 401(k) options. Nevertheless, a lack of understanding only exacerbates potential hardships brought on by periods of poor performance.

Akin to most financial products, investors often cite an inability to understand prospectuses and other related literature as causes for their misconceptions. Prospectuses by nature are difficult to read given the plethora of mandated disclosures required. Nonetheless, it is all-too-likely that fund managers would navigate around potential "red-flags". Sadly, a failure to comprehend their prospectus may have exposed investors to risks they wished to have avoided.

Regulatory Reform

Regulatory reform to target date funds is an aspect of the financial-services industry overhaul being pushed on Capitol Hill that has received less attention than others. The task is being captained not by the Senate Banking or House Financial Services Committees, but by the Senate Special Committee on Aging, under the chairmanship of Senator Herbert Kohl (D-Wisconsin).

The committee works in tandem with the Department of Labor (who oversees most 401(k) regulations, including the QDIA) and the Securities and Exchange Commission (who have jurisdiction over financial products and fund managers).

Prompting the inquiry were the outrageous losses several supposed "risk-adverse" target date funds near their retirement date suffered. Regulators questioned whether such firms had appropriate equity allocations given their impending target year. One of the suggested solutions is the implementation of a cap on equity allocations. (CNNMoney.com, 2009) A ceiling placed on a fund's equity allocation is a sensible approach to curtailing risk. Upon further review, given the myriad of financial products at the disposal of target date funds, it would be easy for many funds to still be exposed to excessive levels of risk without holding a disproportionally large equity allocation. Not all equities are equal in terms of risk, with emerging market stocks and shares of small cap companies being more volatile than most "blue chips". A larger fixed income allocation can be excessively unstable if a large share is invested in high-yield or "junk" bonds, or, as was the case in several near-date funds in 2008, securitized assets such as mortgage-backed securities.

Alternative Suggestions

A more appropriate method to manage risk would be to adopt a value-at-risk or "VAR" limit that varies depending on the amount of time until the target date. VAR is the maximum amount of capital a portfolio is estimated to lose, within a certain confidence level, over a specific period of time. VAR levels are generally computed by analyzing historic performance numbers in terms of frequency and constructing a frequency distribution. Since VAR has three components (confidence, period length, an overall losses), regulators could mandate certain limits in each not

be breeched. The closer a fund is to its target date, the more restrictive regulators could be for each. If computed using actual holdings (or by aligning each holding with their most highly correlated benchmark), VAR would give a much more detail snapshot of the actual risk exposure of a target date fund.

A chorus of financial professionals has begun to advocate the need for target date offerings to be more varied to better accommodate the wide diversity of investors. As discussed earlier, investors with the same target date for retirement can differ significantly in levels of risk appetite and return requirements from their IRA or 401 (k). In many cases current target date investment models miss the optimal risk-return balance best suited for their investors by attempting to adopt a "one-size-fits-all" model.

A better method being proposed is alternative share classes to the standard retirement year based on target date funds that hold either conservative, moderate, or aggressive asset allocations. Investors who will rely more upon their IRA or 401 (k) to fund their retirement could select a conservative target year "X" fund while investors less dependent on their IRA or 401 (k) can opt for an aggressive share class to attempt to maximize their returns. Furthermore, investors could be given the option to switch between share classes if their overall wealth status changes and it become sensible to adopt a different risk profile beyond only the time remaining until retirement.

Most recently, Nobel Laureate Robert C. Merton has introduced a target-date approach to retirement investing that works in reverse of the common method of contributing "X" amount of dollars over time and aiming to maximize the final total at retirement by way of investment returns. Merton's method instead has investors state a desired final amount and then engineers in reverse the most probable asset allocation and, if necessary, any additional cash flows into the

fund. For instance, an investor wanting an account balance of $1,000,000 at their target date, currently having $100,000, contributing $10,000 over the next 15 years would have their glide path and asset diversification situated in the manner which when compared to historical returns equates to the highest probability of reaching this goal. Overtime, as real world returns are finalized, the glide path can be adjusted to compensate for any discrepancies. In other words, "This approach acts like a satellite-navigation system for a car, automatically replotting the route when the plan goes off-course." (*The Economist,* Nov 26 2009*).*

In theory alone (the exact specifics of Mr. Merton's system are unavailable to the public), Mr. Merton's approach presents many of the positive benefits associated with target date retirement planning, namely devising an appropriate asset allocation over a long period of time with the objective of maximizing, on a risk-return basis, the final ending amount. However, this approach does nothing to eliminate performance risk or whether an investor will realistically reach their stated goal without over-sized cash injections towards the later stages of the glide path. Nevertheless, this approach does introduce a critical element that all investors must consider when choosing a glide path and deciding how much to invest into the fund over time: What dollar amount do I wish to end up with? In the coming years, target date funds will likely look to incorporate this figure when designing fund offerings, and will become more varied and better suited to a particular type of investor's needs, rather than the current "one-size-fits-all" approach as of today.

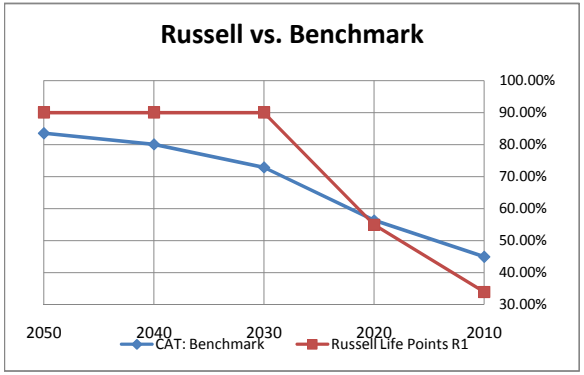
Conclusion

Target date funds are quickly becoming the standard for QDIA vehicles, and for good reason. These funds provide IRA holders and 401(k) participants with a user-friendly product that adheres to every major rule for successful long-term investing: diversification, risk-return orientation, global exposure, and reasonable fees and expenses. Given the complexity associated with constructing and diligently managing an investment portfolio situated to perform well-enough to insure an adequately funded retirement, it behooves most investors to elect and invest for retirement through a target date fund.

From among the available funds, Russell's Life Points® Target Series appears situated to provide the best investment experience for its investors. Russell's approach to asset allocation over the entire glide path outperforms the competition when tested using historical return data. Furthermore, Russell's strategy of diversification and expense ratio assist the fund in providing investors an ideal investment portfolio over an extended period of time.

The demise of the defined benefit pension plan, saddled with the uncertainty regarding the continuation of social security, record market volatility, longer life spans and inflation presents legitimate challenges to any individual hoping to fund an enjoyable retirement. Fortunately, there exists tools, most notably of which is the target date mutual fund, which can relieve many of the portentous burden and greatly augment the likelihood of a financially secure life after work.

Glide Paths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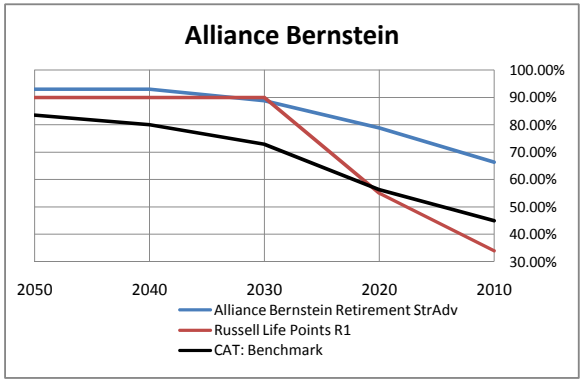
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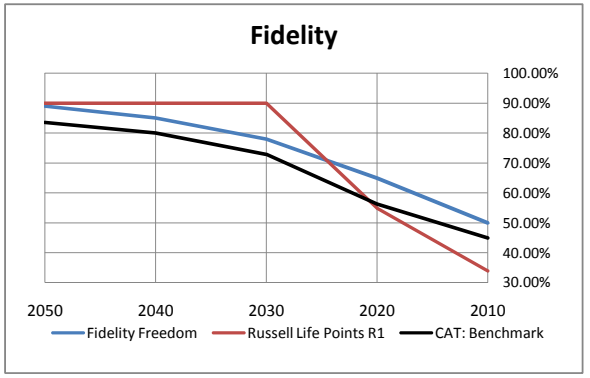
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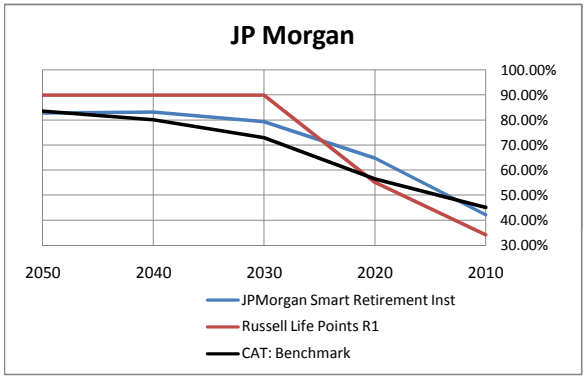
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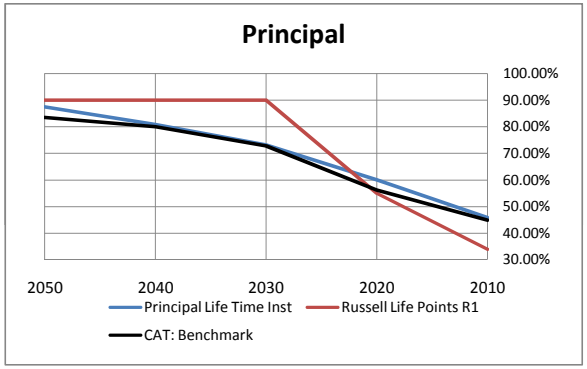
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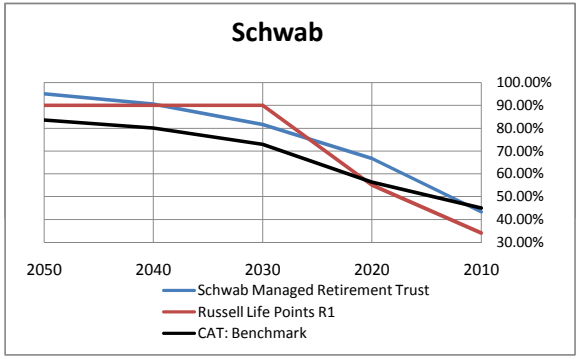
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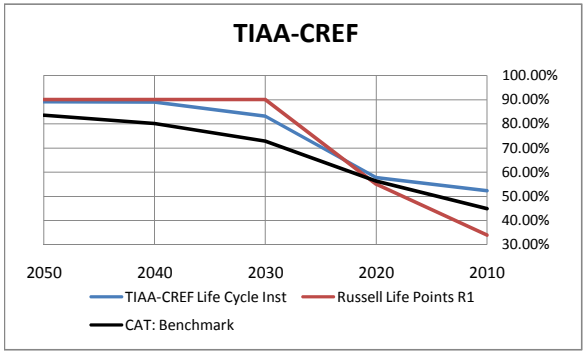
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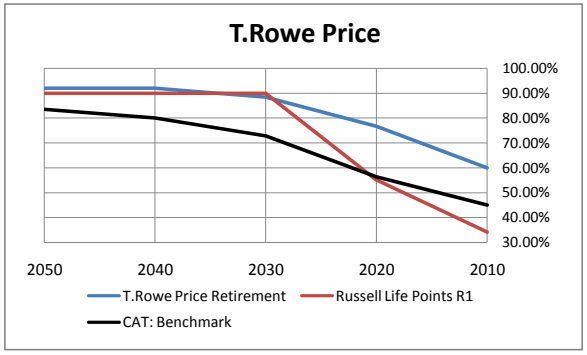
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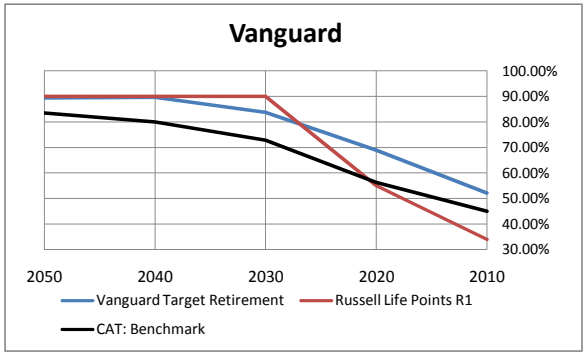
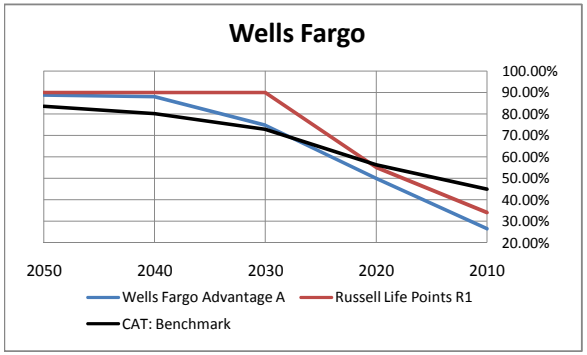
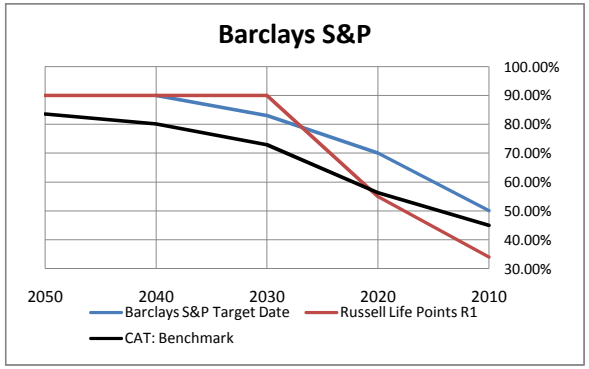
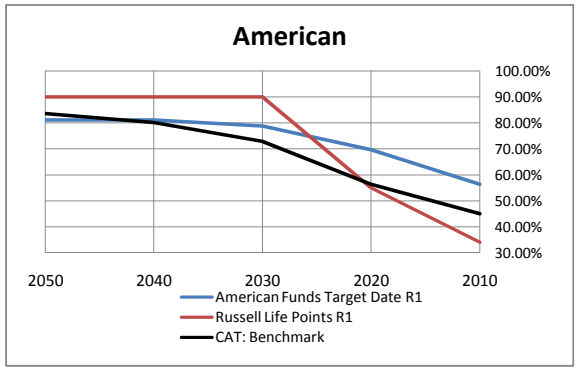
Russell Life Points R1
CAT: Benchmark

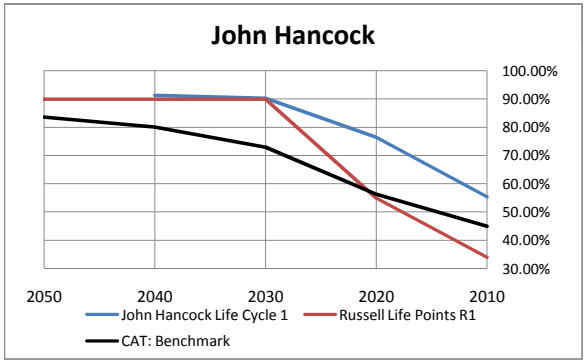

Vanguard
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
2050
2040
2030
2020
2010
Vanguard Target Retirement
Russell Life Points R1
CAT: Benchmark

Glide Paths


Wells Fargo
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
2050
2040
2030
2020
2010
Wells Fargo Advantage A
Russell Life Points R1
CAT: Benchmark


Barclays S&P
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
2050
2040
2030
2020
2010
Barclays S&P Target Date
Russell Life Points R1
CAT: Benchmark


American
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
2050
2040
2030
2020
2010
American Funds Target Date R1
Russell Life Points R1
CAT: Benchmark


John Hancock
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
2050
2040
2030
2020
2010
John Hancock Life Cycle 1
Russell Life Points R1
CAT: Benchmark

Fund Information

Fund Manager	Active or Passive?	Direct or Fund Placements?	REITs?	TIPS?	Emerging Markets?
Fidelity Freedom	Active	Fund	No	No	Yes
T.Rowe Price Retirement	Active	Fund	No	No	Yes
Vanguard Target Retirement	Passive	Index Funds	No	Yes	Yes
Principal Life Time Inst	Active	Fund	No	No	Yes
Wells Fargo Advantage A	Active	Direct	No	No	No
American Funds Target Date R1	Active	Fund	No	No	Yes
Barclays S&P Target Date	Passive	Index Funds	Yes	Yes	Yes
TIAA-CREF Life Cycle Inst	Active	Active and Index Funds	No	Yes	No
John Hancock Life Cycle 1	Active	Fund	Yes	No	Yes
Alliance Bernstein Retirement StrAdv	Active	Direct	Yes	Yes	Yes
JPMorgan Smart Retirement Inst	Active	Fund	Yes	Yes	Yes
Schwab Managed Retirement Trust	Active	Fund, multi-manager	No	Yes	No
Russell Life Points R1	Active	Fund, multi-manager	Yes	*Indirect*	Yes

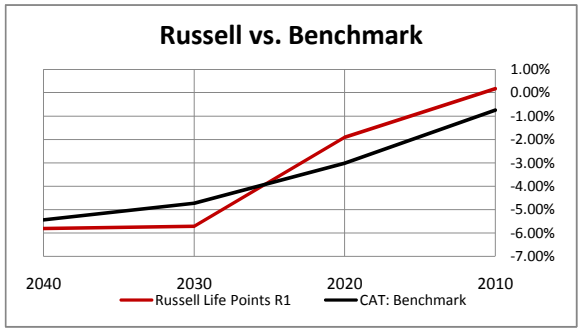
Fund Performance Data

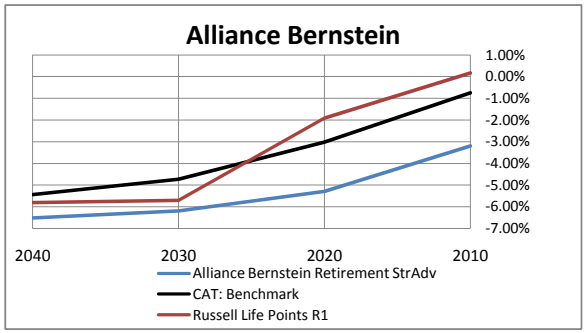
Year To Date Returns (as of 7/31/09)					
Fund Manager	2010	2020	2030	2040	2050
Fidelity Freedom	13.76%	15.68%	16.04%	16.33%	16.67%
T.Rowe Price Retirement	16.15%	19.44%	21.33%	21.84%	21.77%
Vanguard Target Retirement	9.94%	11.59%	13.13%	13.81%	13.77%
Principal Life Time Inst	12.08%	13.29%	13.73%	13.99%	13.96%
Wells Fargo Advantage A	7.12%	10.76%	14.98%	17.51%	17.99%
American Funds Target Date R1	11.68%	13.68%	15.76%	15.98%	15.93%
Barclays S&P Target Date	6.19%	8.71%	10.56%	11.87%	NA
TIAA-CREF Life Cycle Inst	10.51%	12.32%	13.80%	14.51%	14.21%
John Hancock Life Cycle 1	17.39%	19.00%	19.46%	19.46%	NA
Alliance Bernstein Retirement StrAdv	15.46%	16.14%	16.38%	15.73%	17.35%
JPMorgan Smart Retirement Inst	12.93%	15.23%	16.26%	16.47%	16.35%
Schwab Managed Retirement Trust	11.75%	13.44%	14.23%	14.77%	14.80%
Russell Life Points R1	12.55%	13.78%	14.78%	14.82%	14.85%
CAT: Benchmark	12.28%	12.99%	15.13%	16.05%	16.75%

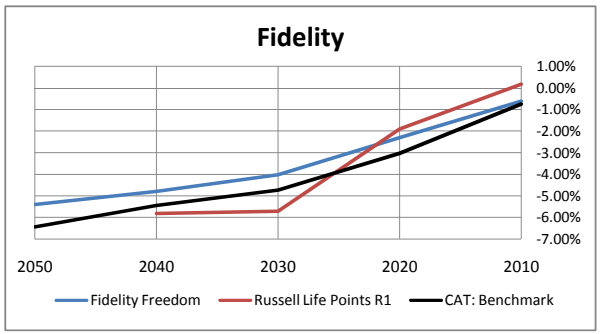
1 Year Returns (as of 7/31/09)					
Fund Manager	2010	2020	2030	2040	2050
Fidelity Freedom	-9.15%	-13.69%	-17.67%	-19.28%	-20.76%
T.Rowe Price Retirement	-8.32%	-12.67%	-15.92%	-16.69%	-16.74%
Vanguard Target Retirement	-7.28%	-11.29%	-15.49%	-16.57%	-16.67%
Principal Life Time Inst	-14.53%	-16.92%	-19.17%	-20.81%	-21.73%
Wells Fargo Advantage A	-2.02%	-8.21%	-13.61%	-16.42%	-15.80%
American Funds Target Date R1	-11.90%	-14.64%	-15.75%	-16.12%	-15.83%
Barclays S&P Target Date	-7.28%	NA	NA	NA	NA
TIAA-CREF Life Cycle Inst	-8.08%	-12.37%	-16.72%	-17.82%	-20.03%
John Hancock Life Cycle 1	-10.91%	-15.51%	-18.96%	-19.12%	NA
Alliance Bernstein Retirement StrAdv	-14.37%	-18.13%	-20.57%	-21.27%	-19.59%
JPMorgan Smart Retirement Inst	-4.50%	-9.75%	-13.75%	-14.41%	-13.51%
Schwab Managed Retirement Trust	-7.64%	-12.95%	-16.60%	-18.50%	-19.33%
Russell Life Points R1	-6.00%	-11.80%	-20.66%	-20.54%	-19.54%
CAT: Benchmark	-9.15%	-12.94%	-16.82%	-18.49%	-18.79%

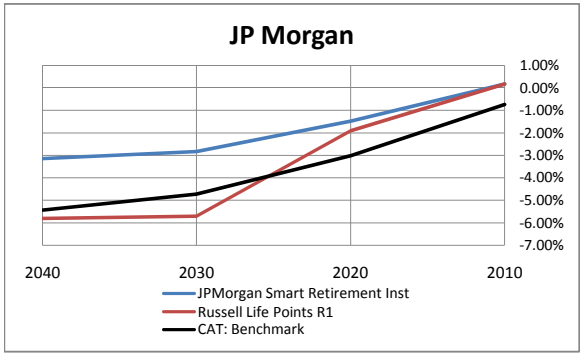
3-Year Returns (as of 7/31/09)					
Fund Manager	2010	2020	2030	2040	2050
Fidelity Freedom	-0.61%	-2.30%	-4.01%	-4.78%	-5.39%
T.Rowe Price Retirement	-0.15%	-1.93%	-3.25%	-3.65%	NA
Vanguard Target Retirement	0.61%	-1.26%	-3.16%	-3.71%	-3.74%
Principal Life Time Inst	-4.72%	-5.02%	-5.65%	-6.14%	-6.40%
Wells Fargo Advantage A	1.96%	-0.34%	-2.51%	-3.74%	NA
American Funds Target Date R1	NA	NA	NA	NA	NA
Barclays S&P Target Date	NA	NA	NA	NA	NA
TIAA-CREF Life Cycle Inst	-0.58%	-2.60%	-4.80%	-4.84%	NA
John Hancock Life Cycle 1	NA	NA	NA	NA	NA
Alliance Bernstein Retirement StrAdv	-3.19%	-5.29%	-6.20%	-6.52%	NA
JPMorgan Smart Retirement Inst	0.18%	-1.48%	-2.83%	-3.15%	NA
Schwab Managed Retirement Trust	-0.82%	-3.19%	-4.95%	-5.81%	NA
Russell Life Points R1	0.18%	-1.90%	-5.71%	-5.81%	NA
CAT: Benchmark	-0.74%	-3.02%	-4.73%	-5.44%	-6.43%

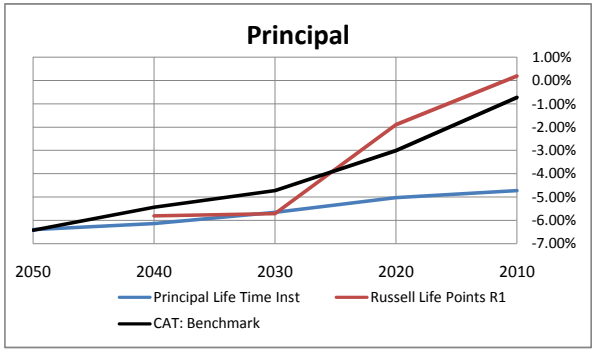
3-Year Returns

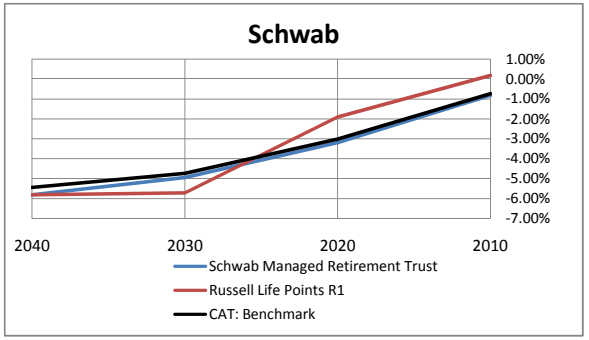


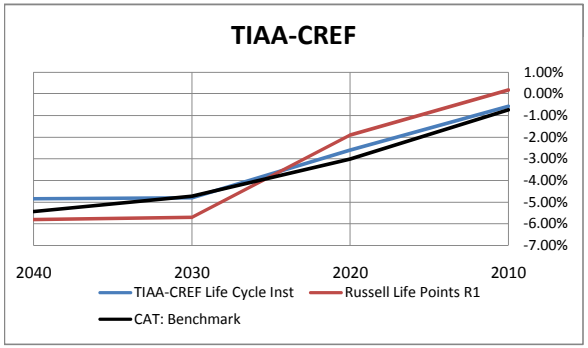


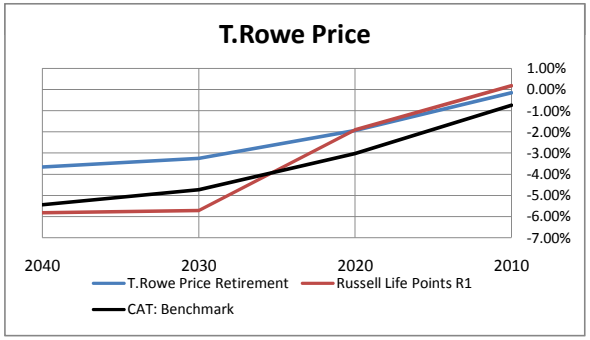


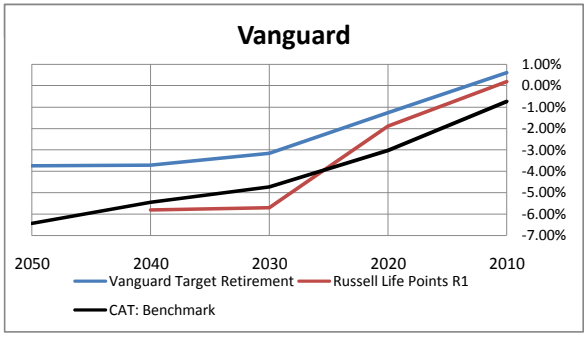


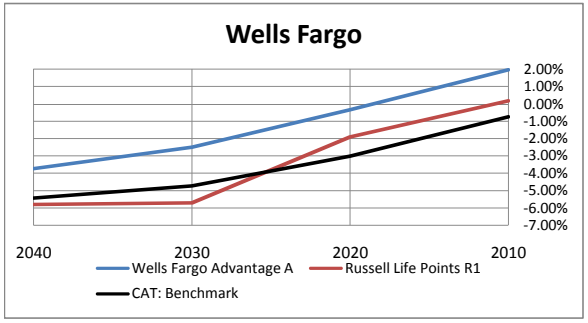












NOTE: American, John Hancock, Barclays omitted (<3 yr history)

Fees and Expenses

Morningstar Net Expense Ratio					
Fund Manager	2010	2020	2030	2040	2050
Fidelity Freedom	0.64%	0.72%	0.76%	0.79%	0.82%
T.Rowe Price Retirement	0.61%	0.68%	0.72%	0.73%	0.73%
Vanguard Target Retirement	0.19%	0.19%	0.19%	0.19%	0.19%
Principal Life Time Inst	1.07%	1.13%	1.16%	1.18%	1.20%
Wells Fargo Advantage A	0.94%	0.96%	0.97%	0.98%	0.98%
American Funds Target Date R1	0.85%	0.86%	0.88%	0.90%	0.91%
Barclays S&P Target Date	0.31%	0.31%	0.30%	0.29%	NA
TIAA-CREF Life Cycle Inst	0.66%	0.69%	0.72%	0.72%	0.72%
John Hancock Life Cycle A	1.36%	1.34%	1.39%	1.41%	NA
Alliance Bernstein Retirement StrAdv	0.64%	0.72%	0.76%	0.76%	0.76%
JPMorgan Smart Retirement Inst	0.66%	0.77%	0.86%	0.87%	0.86%
Schwab Managed Retirement Trust	0.45%	0.45%	0.45%	0.45%	0.45%
Russell Life Points R1	0.68%	0.75%	0.86%	0.86%	0.86%
CAT: Benchmark	1.13%	1.22%	1.25%	1.27%	1.25%

Fund Manager	Fee Ranges (%)
Fidelity Freedom	0.64-0.82
T.Rowe Price Retirement	0.61-0.73
Vanguard Target Retirement	0.19
Principal Life Time Inst	1.07-1.20
Wells Fargo Advantage A	0.94-0.98
American Funds Target Date R1	0.85-0.91
Barclays S&P Target Date	0.29-0.31
TIAA-CREF Life Cycle Inst	0.66-0.72
John Hancock Life Cycle A	1.36-1.41
Alliance Bernstein Retirement Strategic Adv	0.64-0.76
JPMorgan Smart Retirement Inst	0.66-0.86
Schwab Managed Retirement Trust	0.45
Russell Life Points R1	0.68-0.86
CAT: Benchmark	1.13-1.27

Russell Life Points Strategy Funds